References

1. Armaleh, S., and Desai, C. S. (1987). "loaded-deformation response of axially loaded piles." Journal of Geotechnical Engineering , Vol. 113 , No. 12, paper No. 22038.
2. Ahmed, O. M. (2000). "Analysis of stone columns using the finite element method". M. Sc. Thesis, Sudan University, Sudan.
3. ADINA 900 Nodes manual , Version 8.1,Copyright© 1994-2003 ADINA R&D ,Inc. Website http://www.adina.com.
4. Awad, M. Z. (1994). "Stratigraphic, palynological and paleoecological studies in east central Sudan (Khartoum and Kosti basins) late Jurassic to Mid-Tertiary." Berliner Geowiss. Abh (A) 161.
5. Awad, M. Z. (1993). "Stratigraphic and tectonic significant late cretaceous sediments in bagbag basin, central Sudan."In Thorwehe, U and Shandelmeier, H (eds). Geoscieitfic Research in Northeast Africa, PP 421-427, Rotterdam, and Brookfield (A. A. Balkema) Berlin.
6. Andrew, G. (1948). "The geology of Sudan." In Tothill, J. D. (1948). Agriculture in Sudan, PP. 84-128. Oxford University Press, London.
7. Bathe, K.J (1996), "Finite Element Procedure" , Prentice-Hall, Inc.
8. Berezantzev, V. G., Khristoforov, V. and Golubkov, V. (1961). "Load bearing capacity and deformation of piled foundation". Proc. 5th Int. Conf. Soil Mech. Fdn Engng, Paris, 2, 11-15.
9. Bireir, F. A. (1993). "Sedimentological investigations around the state of Khartoum and on the northern central part of gezira,central Sudan." M. Sc. Thesis, University of Khartoum, Sudan.
10. Das, B. M. (1999), "Principles Of Foundation Engineering." International Thomson Publishing Company.
11. Desai, C. S. (1974). "Numerical design-analysis for piles in sands". J. Geoteh. Engng, Am. Soc. Civ. Engrs 100, NO. GT6, 613-635.
12. Desai C.S.& Abel J.F. (1972) "Introduction to the Finite Element Method: A Numerical Method for Engineering Analysis" Van Nostrand Reinhold Company.

13. El Bushi, I. M., and Abdelsalam, Y. (1982). " Stratigraphy and groundwater geology of the gezira plain, central Sudan."in Williams and Adamson (Eds.). A land between two Niles, Rotterdam, Balkema, PP. 246.
14. Elhaj, H. A. and Yousif, H. O. (1984). "Some geotechnical propertiesof the national capitals top soils" BRRI / Information Series 84/1.
15. Frank, R. (1985). "Recent developments in the predictionof pile behaviour from pressuremeter results". Proc. Symp. from Theory to Practice on Deep Foundations, Porto Alegre, Brazil 1, 69-99.
16. Focht, J. A. (1967). "Discussion to paper by Coyle and REESE", j. Soil Mechs. Fdn. Engng, Am. Soc. Civ. Engrs 93, No. SM 1, 133-138.
17. Farwa, A. G. (1978). "Geology and structure of the gezira area as deduced from gravity measurements." M. Sc. Thesis 75p. Department of geology, University of Khartoum, Sudan.
18. Farah, E. A. (1994). "Khartoum waste geology of the northern part of the Khartoum basin-centeral Sudan." M. Sc. Thesis 81p. Department of geology, University of Khartoum, Sudan.
19. Faruque, M. O., and Desai, C. S. (1982). "3D Material and Geometric Nonlinear Analysis of Pile." Proc., 2nd Int. Conf. On Numerical Methods in Offshore Piling, 553-557, University of Texas, Texas.
20. Kraft Jr., L. M., Ray, R. P.,and Kagawa, T. (1981). "Theoretical t-z curves." J. Geotech. Engrg. Div., ASCE, 107(11), 1543-1562.
21. Kucukarslan, S. and Banerjee, P. K. (2004). "Inelastic analysis of pile-soil interaction." J. Geotech. And Geoenvir. Engrg., Volume 130,Issue 11, pp. 1152-1157.
22. Meyerhof, G. G.(1976), "Bearing capacity and settlement of pile foundations". J. Geotech. Engng, Am. Soc. Civ. Engrs 102, No. GT3, 195-228.
23. Meyerhof, G. G. (1959). "Compaction of sands and bearing capacity of piles". J. Soil Mechs Fdn Engng, Am. Soc. Civ. Engrs 85, No. SM6, 1-29.
24. Mohamedzein, Yahia E-A. and Chameau, Jean Lou (1996). "Elastic-Plastic finite Element Analysis of Soil Culvert Interacttion". Sudan Engineering Society Journal, Vol. 44, No. 34, pp. 16-29.

25. Mohamedzein, Y; E-A. (1989). “Nonlinear Finite Element Analysis of Soil Culvert Interaction”. A Ph D Thesis, Purdue University, West Lafayette, Indiana, U.S.A.
26. Mohamedzein, Y. E-A, Mohamed, M. G., and El Sharief, A. M. (1999). “Finite Element Analysis of Short Piles in Expansive Soils.” Building and road research institute, University of Khartoum, Khartoum , Sudan.
27. Madabhushi, S.P.G. and Haigh, S.K. (2004). “Finite element analysis of pile foundation subjected to pullout”. http://www2.eng.cam.ac.uk
28. Mohamed, E. A. (2001). “Subsoil analysis of Khartoum city.” M. Sc. Thesis, University of Khartoum, Sudan.
29. Muqtadir, A., and Desai, C. S. (1986). “Three-Dimensional Analysis of Pile Group Foundation.” Int. J. Numer. Anal. Methods Geomech., 10(1), 41-55.
30. Ottaviani, M. (1975). “Three-dimensional finite element analysis of vertically loaded pile groups”. Geotechnique, 25, No. 2, 159-174.
31. O’Neill, M. W., Hawkins, R. A. and Mahar, L. J. (1982). “Load transfer mechanisms in piles and pile groups”. J. Geotech. Engng, Am Soc. Civ. Engrs 108, No. GT12, 1605-1623.
32. Omer, M. K. (1983). “The geology of the nubian sandstone formation inSudan” Geol. and Min. Resource Depart. Sudan 225p.
33. Poulos, H. G. (1989). “Pile Behavior-Theory And Application.” Geotechnique 39, No. 3, 365-415.
34. Poulos, H. G., and Davis, E. H. (1980). “Pile foundation analysis and design”. John Wiley and Sons, New York, N. Y.
35. Perssely J. S. and Poulos H. G. (1986). “Technical notes on practical applications Finite Element Analysis of Mechanisms of pile group behavior.” Int. J. Numerical Analysis Methods Geomech., 10, 213-221.
36. Qureshi, I. R., Almand, D. C. and Sadig, A. A. (1966). “An unusually shaped basalt intrusion in Sudan” Bull. Geofis teor-appl. 3 (30) PP. 151-160.
37. Randolph, M. F. (1981). “Response of Flexible Pile to Lateral Loading.” Geotechnique, V. 31, N. 2, Jun, 1981, pp 247-259.
38. Saeed, E. M. (1976). “Hydrology of Khartoum province and northern gezira area.” Geological Minerals Resources Department, Bulletin 29, 138p.

39. Trochanis, A. M., Bielak, J. and Christiano P. (1991). “Three-Dimensional Nonlinear Study Of Piles”, Journal of Geotechnical Engineering , Vol. 117, No. 3, paper No. 25600.
40. Vail, J. R. (1988). “Lexicon of geological terms for Sudan.” Balkema. Roterdam.
41. Whiteman, A. G. (1971b). “The geology of the Sudan Republic.” 290p. Claredon Press, Oxford, Britain.
42. Wycisk, P., Kitzsch, E., Jass, C. and Reynolds, O. (1990). “Intracratonal sequence development and structural control of phanerozoic strata in Sudan.” Berliner Geowissenschaftliche Abhandlungen. A120, 45-86.